## CADDIS FLIES (TRICHOPTERA) COLLECTED FROM WICKEN FEN, CAMBRIDGESHIRE AND MINSMERE, SUFFOLK DURING 2004–2005

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## ABSTRACT

Caddis fly records from two large wetland nature reserves in south-east England are reported. Nineteen species were recorded from Wicken Fen, Cambridgeshire and 21 species from Minsmere, Suffolk during 2004–2005. The most important find was a specimen of the Red Data Book 1 species *Grammotaulius nitidus* (Muller), which has not been recorded at Wicken Fen for nearly 70 years

Wicken Fen [TL 55 70] is a National Nature Reserve that was set up to protect part of the fen from drainage and has been owned by the National Trust since 1899. The network of dykes and reed beds at this site supports a diverse caddisfly fauna. I visited there on 12–13.vi.2004 and 2–3.ix.2005, and collected 19 species (Table 1). Most specimens were collected using two MV light traps (with permission); one set up in Sedge Fen compartment 19 and the other in St Edmund's Fen compartment 93. Sweeping was undertaken during the day but few specimens were caught. Four of the species recorded are not listed in Friday & Harley (2000): *Ecnomus tenellus* (Rambur) and *Limnephilus sparsus* Curtis are new records for the locality; the larvae of *Leptocerus tineiformis* Curtis were found previously in 1990 and 1991, and there is a single prior record of *Limnephilus extricatus* McLachlan from 1907 (S. Warrington, pers. comm.). Additionally, *Molanna angustata* Curtis has not been recorded there since 1936.

Table 1. Species of adult caddis flies collected from Wicken Fen, Cambridgeshire during 2004–2005.

Ceraclea senilis (Burmeister) 2-3.ix.2005 Ecnomus tenellus (Rambur) 2-3.ix.2005 Glyphotaelius pellucidus (Retzius) 2-3.ix.2005 Grammotaulius nigropunctatus (Retzius) 12–13.vi.2004, 2–3.ix.2005 Grammotaulius nitidus (Muller) RDB1 2-3.ix.2005 Holocentropus dubius (Rambur) 12-13.vi.2004 Holocentropus picicornis (Stephens) 12-13.vi.2004 Leptocerus tineiformis Curtis 2-3.ix.2005 Limnephilus affinis Curtis 2-3.ix.2005 Limnephilus extricatus McLachlan 2-3.ix.2005 Limmephilus flavicornis (F.) 12–13.vi.2004, 2–3.ix.2005 Limnephilus incisus Curtis 2-3.ix.2005 Limnephilus lunatus Curtis 2-3.ix.2005 Limnephilus marmoratus Curtis 2-3.ix.2005 Limnephilus sparsus Curtis 2-3.ix.2005 Molanna angustata Curtis 2-3.ix.2005 Mystacides longicornis (L.) 12–13.vi.2004, 2–3.ix.2005 Oecetis ochracea (Curtis) 12-13.vi.2004, 2-3.ix.2005 Phryganea grandis L. 12-13.vi.2004



Fig. 1. Grammotaulius nitidus (Muller), female, collected Wicken Fen, Cambridgeshire, 2 September 2005, forewing length 20 mm.

The most important record was of *Grammotaulius nitidus* (Muller) (Fig. 1), which is a RDB1 species that has not been recorded from Wicken Fen since 1936 (Wallace, 1991 and S. Warrington pers. comm.). The National Caddis Recording Scheme has records from only 19 British sites and the last British record supported by a voucher specimen (at the Royal Scottish Museum) was collected in 1967 from Barton Turf in Norfolk (I. D. Wallace, pers. comm.), and there is a published record from Kent in 1977 (Harman, 1978).

The single specimen collected recently at Wicken Fen is a female and was found at night on a reed near to the light trap in Sedge Fen compartment 19. I was able to take photographs of this specimen while it was alive and these are believed to be the first live photographs of this species ever taken in Britain. The identification was confirmed by Peter Barnard who compared its genitalia with others in the collections at The Natural History Museum (NHM). When clearing the genitalia it was noted that the abdomen was full of eggs, and that the spermatheca was swollen, indicating that she had recently mated (P. Barnard pers. comm.). This suggests that there is probably a breeding population at Wicken Fen. The larvae of this species have yet to be found in Britain (Wallace *et al.*, 2003); it is hoped this confirmation of a breeding site will encourage searches for the larvae, or breeding from an egg-mass, as the identification characters based on Russian material are very uncertain (I. D. Wallace, pers. comm.). The specimen, preserved in alcohol, has been deposited at the NHM and is the first addition of this species to the collection since 1922.

Minsmere [TM 474 672] is a nature reserve owned by the Royal Society for the Protection of Birds. It is a brackish to fresh-water wetland next to the sea, with open water areas and reed beds (Ogilvie, 1979). A total of 21 species (Table 2) was collected during 10–11.ix.2004 and 30.vii–1.viii.2005. All specimens were collected using two MV light traps, set up near the Eel's Foot Pub in 2004, and inside the reserve (with permission) in 2005 – one on a walkway over a pond in the sandpit and the other in nearby scrub. Sweeping was unsuccessful. The records have been passed

Table 2. Species of adult caddis flies collected from Minsmere, Suffolk during 2004–2005.

Agrypnia pagetana Curtis 30.vii–1.viii.2005 Agrypnia varia (F.) 30.vii-1.viii.2005 Athripsodes aterrimus (Stephens) 30.vii-1.viii.2005 Ecnomus tenellus (Rambur) 30.vii-1.viii.2005 Glyphotaelius pellucidus (Retzius) 10–11.ix.2004 Holocentropus picicornis (Stephens) 30.vii-1.viii.2005 Lepidostoma hirtum (F.) 30.vii–1.viii.2005 Leptocerus tineiformis Curtis 30.vii-1.viii.2005 Limnephilus affinis Curtis 10–11.ix.2004, 30.vii–1.viii.2005 Limnephilus binotatus Curtis, 30.vii-1.viii.2005 Linmephilus centralis Curtis 10-11.ix.2004 Limnephilus decipiens (Kolenati) 10-11.ix.2004 Limnephilus flavicornis (F.) 10-11.ix.2004, 30.vii-1.viii.2005 Limnephilus hirsutus (Pictet) 30.vii–1.viii.2005 Linmephilus lunatus Curtis 10-11.ix.2004 Limnephilus marmoratus Curtis 10–11.ix.2004, 30.vii–1.viii.2005 Limnephilus sparsus Curtis 10–11.ix.2004, 30.vii–1.viii.2005 Melampophylax mucoreus (Hagen) 30.vii-1.viii.2005 Mystacides longicornis (L.) 10–11.ix.2004, 30.vii–1.viii.2005 Polycentropus flavomaculatus (Pictet) 30.vii-1.viii.2005 Triaenodes bicolor (Curtis) 30.vii-1.viii.2005

to the RSPB who have updated their faunal list for this locality. In addition to the species in Table 2, the following species are also known from this site – *Agraylea sexmaculata* Curtis, *Grammotaulius nigropunctatus* (Retzius), *Limnephilus rhombicus* (L.), *Oecetis lacustris* (Pictet), *Oecetis ochracea* (Curtis) and *Phryganea grandis* L. (R. Harvey pers. comm.). It is anticipated that this list will grow with further collecting.

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